Abstract

A balloon catheter for use in treating a condition of a vessel occurring near a bifurcation defined by the intersection of a main vessel with a side branch vessel comprises a shaft which comprises a proximal end, a distal end, a longitudinal passageway extending between the proximal and distal ends, and a transverse hole extending from the passageway. The balloon catheter also comprises a balloon head which is mounted on the shaft and which comprises an elongated balloon portion having a generally uniform outer diameter surface, an intermediate portion secured to the shaft proximate the hole, a port formed in the intermediate portion in alignment with the hole, and a portal extending between the outer diameter surface and the intermediate portion. In this manner, a proximal end of a first guide wire which is pre-positioned in the main vessel may be inserted into the distal end of the shaft and threaded through the longitudinal passageway and out the proximal end of the shaft, and a proximal end of a second guide wire which is pre-positioned in the side branch vessel may be inserted into the portal, the port and the hole and threaded through the longitudinal passageway and out the proximal end of the shaft.